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**Cc:** []  
**From:** CN=Carolyn Yale/OU=R9/O=USEPA/C=US  
**Sent:** Fri 10/21/2011 12:09:54 AM  
**Subject:** Re: Review of Appendix D -- selenium

Last comments, regarding the selenium section:

Section D5.2.1 is garbled and needs wholesale rewrite. Locations, time frame, standards... it's all confused and in places erroneous. We could cite our ANPR write-up and use the recent watershed and nps success texts to provide basic facts for a shorter profile of regulatory actions such as standards and TMDL development and implementation.

Corrections and clarifications should include:

- areas that are, and are not, in compliance with existing objectives
- the current (pre-proposal) conditions re SJ flow routing (periods when SJ water is substantially cycled south again), and potential changes in this routing with the proposal.

Information that should be added:

- the North Bay TMDL (in-progress) and information from this TMDL regarding sources and controls
- concerns regarding adequacy of existing standards, based on better understanding of physical, chemical and foodweb processes affecting species exposure
- explanation of the foodweb/ ecosystem and estuarine dynamics models that link important variables affecting selenium bioavailability, bioaccumulation and exposure. We should encourage using this conceptual framework to evaluate potential effects of actions.
- Discuss what we still need to learn about the processes driving the variations in selenium concentrations in B-D foodwebs (e.g., inter-annual variations in clam uptake)

We should pass on an update of EPA's work toward promulgating site-specific criteria for the B-D and the species and areas of particular concern (eg sturgeon, Suisun). This raises some question about the BDCP conclusions that the anticipated levels of Se loading to Delta will not be problematic (judged by current wqs).

I would add that the analytical approach is confined to the effects of the preliminary proposal; this is more limited than a NEPA analysis. NEPA looks at cumulative and indirect actions and processes-- for good reason. Consider, for example, the possibility (of moving selenium into the Delta (as discussed in App D--a little ways, under the assumed operations) that may be mobilized as a result of expanded flood plains and occasional inundation. Under moderate hydrologic conditions, the selenium doesn't reach Suisun, where the overbite clam concentrates. App D stops at this point, assuming that this is the limit of impacts from the action (see D-40). Yet there is evidence that high flood flows (not part of the planned action) transport contaminants farther into the Delta.

In other words, if this effects analysis is going to be limited to directly related impacts it will be important for the NEPA analysis to expand on indirect and cumulative effects.

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